REMARKS

Applicants request re-examination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, in light of the remarks that follow.

RESTRICTION, SCOPE AND CLAIM AMENDMENTS

Claims 1-8, 12 and 16-55 are now in this application. Claims 9-11 and 13-15 have been cancelled, without prejudice or disclaimer, in compliance with the restriction requirement, since the cancelled process claims related to methods of making compounds outside the elected R=CHOH genus. In further compliance with the restriction/election requirement, applicants have restricted the compound and composition claims, i.e. Claims 1-5, 38-47 and new Claims 48-50 and 53-55, to the genus defined by the Examiner. The chemical process and method of treatment claims, i.e. Claims 6-8, 12, 16-37 and new Claims 51-52, have been likewise restricted to the genus of compounds defined by the Examiner.

With respect to the claims withdrawn from consideration, Claim 4 does not read on the elected species but it does fall within the elected genus and should be rejoined and examined if the genus of Claim 1 is found patentable. The method of preparation of Claim 6 is limited to the preparation of a compound of formula 1 wherein R is CHOH, R_1 and R_2 are each H and R_3 is SCH_3, a subgenus within the genus being examined by the Examiner. In the event that this subgenus is found allowable, process Claim 6 and its dependent Claims 7, 8 and 12 should be rejoined and examined. Claims 16-37 and new Claims 51-52 are method of treatment claims, restricted to administration of a compound of the elected genus; therefore if the

elected genus is found allowable, these method claims should be rejoined and examined.

New Claims 48 and 53 are compound and composition claims, respectively, directed to a portion of the genus of amended Claim 1; in Claims 48 and 53, the definition of R_3 is simply SR_6 wherein R_6 is C_1-C_6 alkyl. This value of R_3 is specifically supported by Claim 2 and paragraph [0015] of the original specification. Claims 49 and 54 parallel Claims 3 and 40, but depend, respectively, from new Claim 48 or 53, respectively. Claim 50 and 55 are drawn to the elected species, (4-methylthiophenyl)-naphth-1-yl-carbinol, and to the composition comprising it. Thus, all of new Claims 48-50 and 53-55 read on the elected genus and on the elected species.

New Claim 51 is a method of treatment claim comprising administering a compound as defined by Claim 48, while Claim 52 is a method of treatment claim comprising the elected species. In the event that Claims 48-50 are found allowable, Claims 51 and 52 should be examined on their merits.

It is clear from the foregoing that no new matter has been introduced by the claim amendments.

CLAIM REJECTIONS - 35 U.S.C. § 103

Claims 1-3, 5, 38-40 and 42-47 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rotstein et al. U.S. Patent No. 5,962,531. Applicants submit that the Examiner's position is unjustified and that all of the claims are patentable over the Rotstein et al. '531 patent.

The compounds of the present invention differ structurally in several respects from the '531 compounds. First, the R_3 group is attached to the naphthyl ring system

in the '531 patent and to the phenyl ring herein. These are not, strictly speaking, believed to be position isomers because the R_3 substituent is not on the same ring; Further, the R_3 substituent herein is required to be in the para position of the benzene ring relative to the CH(OH) bridge; in the '531 patent, the relationship between the A bridge and the R_3 group is set in a position which is not a para position. Still further, while CHOH is among the many definition of A in the '531 patent, there is not a single specific compound in the patent in which A is CHOH, yet there are more than 100 specific compounds defined therein. The teachings of preferred embodiments in column 13 of the '531 patent indicate that A is preferably other than CHOH. This does not lead one of ordinary skill to select a CHOH bridge. Also, although R^1 on the naphthyl ring can be H in the '531 patent, most of the patent's compounds have a methoxy group or other more sizeable substituent at that position next to the ring atom to which A is linked. Applicants' compounds do not have such a substituent on the naphthyl ring in the position adjacent the CHOH bridge. There is nothing in the cited reference which would lead one of ordinary skill to first select the CHOH bridge, which is not exemplified or taught as preferred by the reference, then remove the R^3 group from the reference's naphthyl system where it was on the ring not bearing the A linkage, and move it to a position on the benzene ring which is para is to CHOH group. There is simply no suggestion in the reference to make these significant changes, and no expectation of success.

Moreover, in applicant's elected species, their R_3 is SCH_3 (new Claim 50) and in new Claims 48 and 49, R_3 is SR_6 wherein R_6 is C_1-C_6 alkyl. In the '531 patent, R^3 must be $-SO_2R^{12}$ or $-SO_2NR^{13}R^{14}$ (where R^{12} can be, *inter alia*, alkyl and R^{13} and R^{14} can have various meanings). In no event can R^3 in the reference be SCH_3 or S(C_1-C_6 alkyl). Applicants' SR_6 where R_6 is C_1-C_6 alkyl is believed to be structurally

distinct from the groups in the prior art. Indeed, the '531 compounds are described as COX-2 inhibitors therein. The SO_2CH_3 and SO_2NH_2 type of groups are highly characteristic of COX-2 inhibitors. See the following attached documents:

(1) Celecoxib, http://en.wikipedia.org/wiki/Celecoxib, February 12, 2007;

(2) Rofecoxib, http://en.wikipedia.org/wiki/Vioxx, February 12, 2007;

(3) Parecoxib, http://en.wikipedia.org/wiki/Parecoxib, February 12, 2007;

(4) Etoricoxib, http://en.wikipedia.org/wiki/Etoricoxib, February 12, 2007; and

(5) Valdecoxib, http://en.wikipedia.org/wiki/Valdecoxib, February 12, 2007.

It can be seen from the structures of these established COX-2 inhibitors that a $\underline{SO_2}NH_2$, $\underline{SO_2}CH_3$ or $\underline{SO_2}NHCOC_2H_5$ is found in every one of them, just as an $-\underline{SO_2}R^{12}$ or $\underline{SO_2}NR^{13}R^{14}$ is required in the '531 patent COX-2 inhibitors. There would be no expectation based on this that even further modifying the '531 structure beyond what needs to be done with respect to A and the position of R^3 to arrive at an SCH_3 or other S-alkyl grouping for R_3 would be successful in providing yet other COX-2 inhibitors, much less that all of these changes would provide compounds having the utilities described in applicants' specification.

CLAIM REJECTIONS - 35 U.S.C. § 112, SECOND PARAGRAPH

Claim 1 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because of two definitions of R therein. R is now defined only as CHOH in Claim 1, in accord with the restriction/election requirement. This rejection is therefore moot.

CLAIM REJECTIONS- 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 38-40 and 42-47 have been rejected under 35 U.S.C. § 112, first paragraph because the specification, while enabled for treating certain disorders (estrogen deficiency, osteoporosis, bone loss, bone formation and breast cancer), are considered lacking in enablement as to preventing diseases. This rejection is moot with respect to "preventing" because the word is no longer present in the claims. Moreover, with one exception, the claims no longer refer to conditions other than those the Examiner considers enabled. The exception is the treatment of hyperlipidaemia, which has been inserted in the claims in place of the more general "cardiovascular disorders". *In vivo* testing for anti-hyperlipidaemic activity is set forth in paragraphs [0120], [0121] and [0122] of the specification, which is clearly enabling. Consequently, the amended claims are believed to be free of the 35 U.S.C. § 112, first paragraph, rejection.

In view of the foregoing, it is believed that all of the claims as amended hereinabove are free of all record rejections. Further, favorable action in the form of a Notice of Allowance is believed to be next in order and is earnestly solicited.

Respectfully submitted,

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